same time that the aneurismal disease must be considered to have been advancing. To the congested and hepatized condition of the lungs diagnosticated during life, and discovered after death, we may point as satisfactorily explaining this apparent anomaly.

But the great practical lesson which the case suggests has reference to diagnosis; fresh proof is afforded by it of the obscurity which surrounds the progress of aneurisms about the commencement of the aortic arch. In the majority of instances the symptoms that result from compression of the surrounding organs, offer only equivocal evidence; it remains for a pulsating tumour, or a sudden arterial hæmorrhage, to reveal the true nature of the affection. Sometimes, indeed, the trachea, the œsophagus, or the recurrent nerve, sustain such impediments to their functions from pressure, that the diagnosis is not a matter of difficulty. On the other hand may be cited, as a striking contrast, the case recorded by Mr. Lawrence in the "Medico-Chirurgical Transactions," Vol. 6, where an aneurism of the arch of the aorta so pressed on the trachea as to ulcerate its lining membrane, and yet the patient did not experience any dyspnoea, death arose from a different cause, and the discovery of the aneurism, which was small and filled with firm laminated coagula, was quite accidental.

Laennec, when speaking of aneurism of the thoracic aorta, remarks:—"It cannot be known with certainty till it shows itself externally; it can hardly be suspected even when it compresses some important organ and greatly deranges its functions."

And in support of the same doctrine, the case of the late Mr. Liston may be adduced. At first, it will be remembered, his symptoms were attributed to tubercular condensation of the superior lobe of the lungs. It was thought doubtful whether the dyspnoea depended on enlargement of the bronchial glands, or on aneurism; the latter was only suspected by the distinguished physicians in attendance. This suspicion proved to be correct, for a false aneurism of the aorta was found of the size of an orange, which had burst into the trachea, and, of course, had led to the copious hæmoptysis that took place five months before death.

In the Catalogues of the Museum of the Royal College of Surgeons, and of St. Bartholomew's Hospital, three cases of aneurism pressing on the trachea are described, in two of which an opening was made into the trachea to relieve the symptoms*

* The first (No. 1665, in Catalogue College of Surgeons Museum, London,) is described as aneurism of the posterior and upper part of the arch of the aorta, attached by a narrow neck, and opening into it by an oval mouth, half an inch wide, immediately below the origin of the innominate. The sac pressed on the trachea and burst into its front part just above the bifurcation, by a small irregular opening. *Laryngotomy* had been performed (probably for symptoms pointing to the *larynx*.)

The second case (Vol. 1, series 13, No. 69, Catalogue St. Bartholomew's Hospital Museum, London,) is described as aneurism of the upper part of the arch of the aorta, involving the arteria innominata, slightly compressing the trachea. The patient was supposed to have *chronic asthma*; to relieve suffocation the *trachea* was opened. In the operation a large thyroid vein was opened, and the patient died.

The third case (Vol. 1, series 13, No. 18, same Catalogue,) is that of aneurism of the arteria innominata pressing on the trachea. The patient was twenty years old, and subject to fits of dyspnoea, and in one of these she died. The canal of the trachea is slightly narrowed by the pressure of the innominata.

In the instance under consideration, the absence of all physical signs indicative of disease of the heart or its large vessels, the evidence of solidification in the left lung, the peculiar character of the voice and cough, with other symptoms, led to the inference that the chief lesion was strumous laryngitis, probably advanced to the ulcerative stage, (with pre-existent pneumonia.)

Post-mortem examination corrected the error by discovering another and an adequate cause of the affection of the throat, in the fact of the recurrent nerve being involved in the aneurismal sac; while the condition of the left lung, and the position of the aneurism, explained the paroxysms of difficult breathing.

It is right to add that a suspicion of some unusual pressure upon the recurrent nerve, like that which would be caused by enlarged bronchial glands, had been expressed by me shortly before the patient's decease.

ON THE VARIETIES OF CRANIAL PRESENTATION.

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THE relative frequency of the different cranial presentations has long been a *vexata questio* between the professors of the obstetric art in France and Germany. The French accoucheurs have mostly taken one side of the question, and the Germans the opposite: whilst the greater number of our own countrymen have been disposed to adopt the views of the latter. As the point at issue is one which is of some importance, and which even the limited experience of individuals may tend in some degree to settle, I am induced to bring forward the particulars of a certain number of cases, which have been carefully noted for the purpose. In so doing I have availed myself only of those which have fallen under my own immediate observation, for the most part in private practice; and have refrained from making use of a considerable number which have been attended by the pupils of the Bristol Medical School, under my superintendence, because the discrimination of the varieties of cranial presentation usually requires a higher degree of the "*tactus eruditus*," than can reasonably be expected in those who are yet in *statu pupillari*.

The cases I am about to bring forward have not been selected, but have been taken as they occurred, and amount in all to 286. In classifying these according to the presentation, I shall only refer to the four kinds of cranial presentation which are commonly recognised amongst obstetric authors. In the first of these, which is the ordinary presentation of the head, the occiput of the child is turned towards the left acetabulum of the mother's pelvis; in the second, it is towards the right acetabulum; in the third, towards the right sacro-iliac synchondrosis; and in the fourth, towards the left sacro-iliac synchondrosis. The two first of these positions have been called by Velpeau and some of the French authors, the occipito-anterior positions, because in them

the occiput is placed in the anterior semi-circle of the pelvis; whilst for a similar reason the two last have been called the occipito-posterior positions. The other four positions, by means of which Baudelocque and others make out the list of eight cranial presentations, are those in which the occiput is in apposition with the symphysis pubis, the promontory of the sacrum, or the centre of one or other ilium. The existence of such positions has been denied by many accoucheurs of the greatest experience; whilst those who admit them allow that they are exceedingly rare. I have never met with a well-marked case myself, and, consequently shall make no further mention of them, as I cannot speak from experience.

With respect to the four presentations first mentioned, all authors are agreed as to the great frequency of the first, which is the ordinary presentation of the occiput towards the left acetabulum. But there is great difference of opinion as to the comparative frequency of the other three, especially amongst foreign accoucheurs. Thus, the second position, or that in which the occiput presents towards the right acetabulum, is regarded by Baudelocque, and nearly all the French authors, except Dubois, as next to the first in the order of frequency; whereas it is considered by the late Professor Naegelé and some of the German writers to be the rarest of all. Madame Boivin describes it as occurring in 19 per cent. of her cases, and Madame Lachapelle in 21 per cent; whereas Naegelé met with it only once in 1210 cases. Most of our own accoucheurs implicitly believe with Naegelé in the rarity of this presentation. On the other hand, Dr. Simpson has met with 256 cases of it in 668 cranial presentations. There is the same discrepancy of opinion as to the frequency of the third position, or that in which the forehead is towards the left acetabulum. Naegelé and Stoltz consider it to be the commonest after the first: whereas most of the French authorities consider it to be rare, and place it third in the order of frequency. Naegelé met with 359 cases in 1210, or 29 per cent., whilst Madame Boivin met with only 189 in 20,517, and Madame Lachapelle 164 in 22,243. According to Dr. Simpson it is still more rare, for he met with only one case in 668. There is not so much difference of opinion as to the fourth position, or that in which the forehead is towards the right acetabulum. Most authors consider this to be the least frequent of the two occipito-posterior positions; but this opinion is by no means universal, for Dr. Simpson met with 76 cases of this position, and only one of the third in a total of 668 cases. And Dr. Miller, an American accoucheur, who has lately written on the subject, also considers it to be much more frequent than the third.

The discrepancies pointed out are so striking, that at first sight they might lead to the belief that obstetrical statistics may be made to prove anything, but upon examination it will be found that these differences are more apparent than real. Thus Naegelé considers that nearly all the presentations of the head in the second position were originally, at an early stage of the labour, presentations in the third position, but that as the

labour progressed a change in position was effected by the natural efforts, the head rotating so as to bring the occiput round from the right sacro-iliac synchondrosis behind to the right acetabulum in front, which he believes to be the natural termination of presentations in the third position; and he thinks that from this change having been overlooked, the second position came to be considered so frequent by various authors, because what were really examples of the third position were set down as belonging to the second. His doctrines have been generally adopted in this country; but in France, where perhaps greater attention has been paid to the mechanism of parturition, they have met with some opposition. I shall endeavour, as much as possible, to test these conflicting views, by the cases which I shall bring forward. I need not dwell upon those in which the head presented in the first position, as they only confirm what has been universally observed as to the great frequency of that position. In 247 cases out of 286, or nearly 7-8ths of the whole number, the head presented in that way. I find that the second position occurred in 28 cases out of the 286. I am thus led, from my own experience, to coincide with most of the French authors as to the much greater frequency of the second than of the third and fourth presentations.

There is every reason, *a priori*, for supposing that the second presentation, which is in every way the most similar to the first, should be next to it in frequency; and there is every reason against the probability of its being, as Naegelé considers, the most rare. However, as facts are the only legitimate arguments in discussing such a question, I shall adduce one or two cases in which there could not be the slightest doubt that this presentation was the original one. According to Naegelé, the turn which is described by him as changing the third into the second position, is not effected until the head is fully engaged in the pelvis,—until (to use his words) “it experiences the resistance which the inferior part of the pelvic cavity opposes to it.” But in two of my own cases there could not be the slightest doubt that the head was in the second position when above the brim. In one of these (No. 116,) it was necessary to perform craniotomy, on account of pelvic deformity, which prevented the head from entering the cavity of the pelvis. The head was drawn through the pelvis, and delivered in the position in which it presented,—viz., with the occiput towards the right acetabulum. In another, (No. 272,) which happened lately, the head remained so high above the brim, even when the os uteri was fully dilated, as to be out of reach by an ordinary examination; the only part to be felt was one of the hands. Expecting an arm presentation, I introduced my hand into the vagina, for the purpose of turning, if necessary, and, in so doing, ruptured the membranes. I was then able to feel the head high above the pubes in the second position, in which position it descended into the pelvis after the hand had been pushed up, and remained until it was expelled. These instances alone, although but 2 out of 286, show a greater per centage of the second position than the cases

of Naegelé, who only records 1 in 1210. But in by far the greater number of the 28 cases which I have noted, I examined minutely at an early stage of the labour, when the head was high, and before the membranes were ruptured, without in any instance detecting that this position was the result of a change from the third.

My own experience with regard to the relative frequency of the third and fourth, or occipito-posterior positions does not agree with the statistics which are usually given. The third position is generally considered to be much the most frequent; but in my own cases there were only three instances of this, and eight of the fourth. This result, however, is not singular; as in Dr. Simpson's cases the difference between the two is still greater. Out of 668 cases he met with 76 of the fourth and only one of the third position. Dr. Millar, the Obstetric Professor in the University of Louisville, U.S., (whose work has lately been reviewed in the *British and Foreign Medico-Chirurgical Review*,) has met with the same result; for he remarks:—"I find by reference to my note-book that the fourth position has occurred in my notes oftener than the third, but both together less frequently than the second."

The third position, as I remarked before, has been considered by Naegelé, and also by Rigby, and other English writers, to be much more frequent than the second; and the cause which they allege for the reputed frequency of the second is, that in nearly all the cases of the second position the head originally presented in the third position, but that this circumstance was not noticed by those in attendance. From the reason which they assign one would be led to believe that the diagnosis of the third and fourth positions was a difficult matter at the commencement of labour; but this does not accord at all with my own experience. I have in general had no difficulty in distinguishing these presentations, before the membranes are ruptured, and even before the os uteri is dilated, by noticing a peculiarity in the shape and position of the os uteri, which, as far as I know, is not described in any book on midwifery. The peculiarity I allude to consists in a depression of the posterior lip of the os uteri, and an elevation of the anterior lip, dependent on the position of the child's head. In ordinary labour the child's head is, at the commencement of the labour, flexed upon its body; but during its progress the head becomes still more flexed by the chin approaching still nearer to the sternum. The result of this is, that the posterior half of the child's head is much lower than the anterior. Consequently, in the occipito-anterior presentations, the occiput being in front presses upon the anterior lip of the os uteri, and depresses it much below the level of the posterior lip. But in occipito-posterior presentations the reverse takes place; the occiput being behind depresses the posterior below the anterior lip. Hence the shape and position of the os, on making a vaginal examination, appear to be very different from that which we ordinarily find. In ordinary cases the finger passes but a slight distance into the angle, or cul de sac, formed by the junction of the vagina and

the anterior lip of the os. (See *fig. 1.*) But in the occipito-posterior positions the finger passes high up behind the pubes into the cul de sac just mentioned, which in this case forms an acute angle, as in the first it formed an obtuse angle. (See *fig. 2.*) At the same time

Fig. 1.

Fig. II.

the posterior lip, and even the entire os, is unusually low in the pelvis. From noting this circumstance, I have been able to detect these presentations at an early period of the labour, and have found, as a general rule, that the head does not make the turn which Naegelé and others describe as the ordinary course of events. That it does so sometimes is, nevertheless, quite certain. In one of my eight cases of the fourth position it was very evident. In this case, as soon as the membranes were ruptured the anterior fontanelle was felt just behind the right branch of the pubes, and the right ear behind and a little to the left of the symphysis. Afterwards, as the head descended, the ear could be distinctly felt during each pain to recede from this position and come round to the right side of the symphysis, and pass backwards almost out of reach, until at last the head was expelled with the occiput towards the left thyroid foramen. Immediately upon its expulsion it regained

its former position, with the forehead in front, and looking towards the right acetabulum.

A short time ago I witnessed a similar change of position in a rather difficult case of labour which was attended by one of my pupils, and in which the forehead was originally towards the right acetabulum. But in all the other cases of the third and fourth position, amounting in all to ten, no such turn took place, but the forehead of the child continued throughout the labour in the anterior semicircle of the pelvis. But yet in all these delivery was easily effected by the natural powers, notwithstanding that the head was placed in what is generally considered an unfavourable position. So unfavourable an opinion had some of the older writers respecting the third and fourth positions that some of them considered delivery impossible whilst the head was so placed. Levret, Capuron, and Baudelocque maintained that the forceps was always required to finish such labour, unless either the child was unusually small or the pelvis unusually large. Nor are these views peculiar to the older writers. Blundell, who was generally so averse to meddlesome midwifery, nevertheless thought that the assistance of art was necessary in these cases. The necessity of interference was still more strongly insisted on by Dr. J. Clark, of Dublin, and also by Dewees, who went so far as to observe, that a man is "incompetent to practise midwifery in its best manner who cannot detect and change this malposition of the head, and thus abridge by several hours the misery and pain of his patient." Such opinions, however, were not universal even amongst the older accoucheurs; for Mauriceau, Smellie, and Denman, relate cases in which the labours terminated favourably by the natural efforts when the head was in this position. Amongst modern authorities, Dugés and Velpeau give instances in which unusually large children were expelled in this manner. Notwithstanding, in most works on midwifery at the present time, these presentations are classed amongst the malpositions of the child as causes of difficult labour, and it is recommended that the position of the child's head should be altered, if possible. My own experience by no means confirms this view, as in all the cases I have noted, the labour was very little, if at all, more tedious than in an ordinary presentation, although I allowed the forehead to continue in the anterior semicircle. In one of these (252) it was necessary to deliver with the forceps, on account of convulsions, but not because the labour was protracted.

I am led from this to conclude, that the difficulties which are said to attend such positions are more theoretical than practical, and that many persons have been led to believe in them, from making comparisons of dried pelves and crania, and measuring the several axes and diameters, without making allowance for the very great alteration which may take place in the shape of a child's head during labour, and by means of which it becomes moulded to the canal which it has to traverse. Thus it has been stated, that in consequence of its shape being more

square, the forehead does not adapt itself so well as the occiput to the arch of the pubis, as the head clears the outlet of the pelvis; without considering how materially that shape may be altered by the overlapping of the frontal bones at their suture. It has been likewise stated, that at the moment of expulsion the perineum is put much more on the stretch, and is in more danger of rupture, because the occipito-frontal diameter of the child's head (which in then occipito-anterior presentation, is in relation with the antero-posterior diameter of the pelvic outlet,) is much longer than the trachelobregmatic which is in apposition with it in ordinary cases. Here again no account is taken of the great capability which the occipito-frontal diameter has of being lessened by the overlapping of the parietal and frontal bones at the coronal suture. In fact, in all these instances of occipito-posterior presentations, I have noticed that this shortening actually takes place to a great extent, so that the head is at first so much altered in shape as to be nearly round; whereas in the occipito-anterior presentations the head becomes materially lengthened, especially when the labour is at all protracted. In the 11 cases I have noted of occipito-posterior positions, the perineum did not receive the slightest injury, nor did it seem to be more on the stretch than usual. From these observations I am led to conclude, that under ordinary circumstances the occipito-posterior presentations require no artificial assistance; and that, as a general rule, the powers of nature are sufficient to accomplish delivery safely in any cases of vertex presentation.

ENORMOUS ACCUMULATION OF FLUID IN AN OVARIAN CYST.

By H. COOPER, Esq., M.D., LOND., HULL.

To the Editor of the Provincial Medical and Surgical Journal.

SIR,—The following case occurred in the practice of my friend, Mr. Denton, of Hornsea, near this place, and was seen by me occasionally in consultation. At his request I send you the following notes, which may prove of interest, as showing the enormous accumulation which may take place gradually in the proximity of important organs, without producing any injurious effects, except those of mechanical pressure; and the facility and safety with which these large amounts may be withdrawn by tapping, with proper precautions.

Ann Russell, aged 54, unmarried, of spare habit, very active and energetic, ten years ago, while papering a room, overstretched herself, and was immediately conscious of some internal injury. Shortly afterwards she felt a fullness on the right side, which, without any interference with her general health, and with only mechanical inconvenience, has gone on increasing up to the present date, Nov. 28, 1851. Her condition is now as follows:—The abdominal distension is extreme;